

RECEIVED
CENTRAL FAX CENTER

MAY 02 2007

Serial No. 10/529,449
Amendment dated May 2, 2007
Official Action dated February 2, 2007**Amendments to the Claims:**

The following listing of claims replaces all prior versions and listings of the claims in this application.

Listing of the Claims:

Claim 1 (Currently Amended): A high-molecular weight aliphatic polyester, whose molecular weight has been highly increased by a chain-lengthening reaction of a ring-opening (co)polymer of ~~at least one cyclic ester selected from the group consisting of glycolide or a mixture containing at least 70% by weight of glycolide and at most 30% by weight of another cyclic monomer and lactide~~ with an oxazoline compound to the extent that a rate ratio of increase in molecular weight represented by a ratio (Mw_2/Mw_1) of a weight average molecular weight (Mw_2) of a ~~the~~ ring-opening (co)polymer after the chain lengthening to a weight average molecular weight (Mw_1) of the ring-opening (co)polymer before the chain lengthening amounts to at least ~~1.10~~ 1.35,

wherein the ring-opening (co)polymer before the chain lengthening has a weight average molecular weight of at least 30,000 and is subjected to the chain-lengthening reaction to produce the high-molecular weight ring-opening (co)polymer, and

a difference ($T_2 - T_1$) between a 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening and a 1%-weight loss-starting temperature T_1 on heating of the ring-opening (co)polymer before the chain lengthening is at least 5°C.

Claims 2-3. (Canceled).

Serial No. 10/529,449
Amendment dated May 2, 2007
Official Action dated February 2, 2007

Claim 4 (Currently Amended): The high-molecular weight aliphatic polyester according to claim 1, wherein the weight average molecular weight (M_w) of the ring-opening (co)polymer[[,]] whose molecular weight has been increased by the chain-lengthening reaction[[,]] is at least 120,000.

Claim 5 (Currently Amended): The high-molecular weight aliphatic polyester according to claim 1, wherein the ring-opening (co)polymer having a weight average molecular weight of 30,000 to 110,000 ~~at most 110,000~~ before the chain lengthening is subjected to the chain-lengthening reaction into a high-molecular weight ring-opening (co)polymer having a weight average molecular weight of at least 150,000.

Claim 6 (Canceled).

Claim 7 (Currently Amended): The high-molecular weight aliphatic polyester according to claim 6 1, wherein the 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening is at least 233°C.

Claim 8 (Currently Amended): The high-molecular weight aliphatic polyester according to claim 1, wherein a molecular weight distribution (M_w/M_n) represented by a ratio of a weight average molecular weight (M_w) of the ring-opening (co)polymer[[,]] whose molecular weight has been highly increased by the chain-lengthening reaction[[,]] to a number average molecular weight (M_n) thereof is at least 1.90.

Serial No. 10/529,449
Amendment dated May 2, 2007
Official Action dated February 2, 2007

Claim 9 (Original): The high-molecular weight aliphatic polyester according to claim 1, wherein the oxazoline compound is an oxazoline compound having at least two oxazoline ring structures in its molecule.

Claim 10 (Original): The high-molecular weight aliphatic polyester according to claim 9, wherein the oxazoline compound having at least two oxazoline ring structures in its molecule is 2,2'-m-phenylene-bis(2-oxazoline).

Claim 11 (Currently Amended): A process for producing a high-molecular weight aliphatic polyester, which comprises subjecting a ring-opening (co)polymer of ~~at least one cyclic ester selected from the group consisting of glycolide or a mixture containing at least 70% by weight of glycolide and at most 30% by weight of another cyclic monomer and lactide~~ to a chain-lengthening reaction with an oxazoline compound to highly increase the molecular weight thereof to the extent that a rate ratio of increase in molecular weight represented by a ratio (Mw_2/Mw_1) of a weight average molecular weight (Mw_2) of a the ring-opening (co)polymer after the chain lengthening to a weight average molecular weight (Mw_1) of the ring-opening (co)polymer before the chain lengthening amounts to at least ~~1.10~~ 1.35.

wherein the ring-opening (co)polymer before the chain lengthening has a weight average molecular weight of at least 30,000 and is subjected to the chain-lengthening reaction to produce the high-molecular weight ring-opening (co)polymer.

the ring-opening (co)polymer and the oxazoline compound are subjected to the chain-lengthening reaction under conditions wherein the reaction temperature is not lower

Serial No. 10/529,449
Amendment dated May 2, 2007
Official Action dated February 2, 2007

than the melting temperature of the ring-opening (co)polymer, but not higher than 300°C, and the reaction time is 10 to 30 minutes, and

a difference ($T_2 - T_1$) between a 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening and a 1%-weight loss-starting temperature T_1 on heating of the ring-opening (co)polymer before the chain lengthening is at least 5°C as a result of the chain-lengthening reaction.

Claims 12-15. (Canceled).

Claim 16 (Original): The production process according to claim 11, wherein the oxazoline compound is an oxazoline compound having at least two oxazoline ring structures in its molecule.

Claim 17 (Original): The production process according to claim 11, wherein the chain-lengthening reaction is conducted in the presence of the oxazoline compound in a proportion within a range of 0.005 to 10 parts by weight per 100 parts by weight of the ring-opening (co)polymer.

Claim 18 (Currently Amended): The production process according to claim 11, wherein the ring-opening (co)polymer having a weight average molecular weight of 30,000 to 110,000 ~~at most 110,000~~ before the chain lengthening is subjected to the chain-lengthening reaction into a high-molecular weight ring-opening (co)polymer having a weight average molecular weight of at least 150,000.

Claim 19 (Canceled).

Serial No. 10/529,449
Amendment dated May 2, 2007
Official Action dated February 2, 2007

Claim 20 (Currently Amended): The production process according to claim 11, wherein a molecular weight distribution (M_w/M_n) represented by a ratio of a weight average molecular weight (M_w) of the ring-opening (co)polymer[[,]] whose molecular weight has been highly increased by the chain-lengthening reaction[[,]] to a number average molecular weight (M_n) thereof is at least 1.90.

Claim 21 (New): The high-molecular weight aliphatic polyester according to claim 8, wherein the molecular weight distribution (M_w/M_n) is at least 2.10.

Claim 22 (New): The high-molecular weight aliphatic polyester according to claim 1, wherein the difference ($T_2 - T_1$) is at least 15°C.

Claim 23 (New): The production process according to claim 11, wherein the ring-opening (co)polymer and the oxazoline compound are subjected to the chain-lengthening reaction under conditions wherein the reaction temperature is not lower than the melting temperature of the ring-opening (co)polymer, but not higher than 280°C, and the reaction time is 10 to 30 minutes,

Claim 24 (New): The production process according to claim 11, wherein the 1%-weight loss-starting temperature T_2 on heating of the ring-opening (co)polymer after the chain lengthening is at least 233°C as a result of the chain-lengthening reaction.

Claim 25 (New): The production process according to claim 11, wherein the difference ($T_2 - T_1$) is at least 15°C as a result of the chain-lengthening reaction.

Serial No. 10/529,449
Amendment dated May 2, 2007
Official Action dated February 2, 2007

Claim 26 (New): The production process according to claim 11, wherein the chain-lengthening reaction is conducted in the presence of the oxazoline compound in a proportion within a range of 0.1 to 5 parts by weight per 100 parts by weight of the ring-opening (co)polymer.

Claim 27 (New): The production process according to claim 20, wherein the molecular weight distribution (M_w/M_n) is at least 2.10.

Claim 28 (New): The production process according to claim 16, wherein the oxazoline compound having at least two oxazoline ring structures in its molecule is 2,2'-m-phenylene-bis(2-oxazoline).